

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	16	multiplierless and (IIR or recursive) and (ROM) and (shift near3 register) and adder	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 18:34
S2	121	IIR and (genetic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 17:37
S3	9	S2 and (power near4 ("2" or two))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 17:37
S4	3	multiplierless and filter and genetic	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 17:40
S5	115	multiplierless and filter	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:22
S6	53	S5 and ROM	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 17:40
S7	34	S6 and @pd<"20030708"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:27
S8	1	multiplierless and (first near2 shift near2 register) and (second near2 shift near2 register)and (barrel near3 shift\$5)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:22

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S9	957	(adder near3 trees) and parallel	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:22
S10	671	S9 and @pd<"20030708"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:22
S11	4	S10 and multiplierless	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:28
S12	1	(US-4862402-\$.did.	USPAT	OR	ON	2006/12/09 19:26
S13	2392	("32" near3 shifters)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:30
S14	1973	S13 and @pd<"20030708"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:31
S15	0	S14 and multiplierless	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:28
S16	28	S14 and (IIR or recursive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:32
S17	4	("32 barrel shifters")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:31

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S18	205	(plurality with (barrel adj2 shifters))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:31
S19	159	S18 and @pd<"20030708"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:39
S20	5	S19 and (IIR or recursive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:32
S21	1	(US-20020126858-\$).did.	US-PGPUB	OR	ON	2006/12/09 19:38
S22	56	IIR and (multiplexer with (shift near2 register))	US-PGPUB	OR	ON	2006/12/09 19:45
S23	5	S22 and @pd<"20030708"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:45
S24	76	IIR and (multiplexer same (shift near2 register))	US-PGPUB	OR	ON	2006/12/09 19:45
S25	9	S24 and @pd<"20030708"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/09 19:45
S26	2	(US-20020131487-\$ or US-20030083852-\$).did.	US-PGPUB	OR	ON	2006/12/09 19:56


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IEEE JNL IEEE Journal or Magazine

IEE JNL IEE Journal or Magazine

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 Shen-Fu Hsiao; Yu Hen Hu; Juang, T.-B.; Chung-Han Lee;  
Circuits and Systems I: Regular Papers, IEEE Transactions on [see also Circu Fundamental Theory and Applications, IEEE Transactions on]  
 Volume 52, Issue 8, Aug. 2005 Page(s):1568 - 1579  
 Digital Object Identifier 10.1109/TCSI.2005.851709  
[Abstract](#) | [Full Text: PDF\(896 KB\)](#) IEEE JNL  
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- ☐ 2. **Genetic algorithm approach for the optimization of multiplierless sub-filter the frequency-response masking technique**  
 Ya Jun Yu; Yong Ching Lim;  
Electronics, Circuits and Systems, 2002. 9th International Conference on  
 Volume 3, 15-18 Sept. 2002 Page(s):1163 - 1166 vol.3  
 Digital Object Identifier 10.1109/ICECS.2002.1046459  
[Abstract](#) | [Full Text: PDF\(340 KB\)](#) IEEE CNF  
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- ☐ 3. **New natural selection process and chromosome encoding for the design lattice QMF using genetic algorithm**  
 Ya Jun Yu; Yong Ching Lim;  
Electronics, Circuits and Systems, 2001. ICECS 2001. The 8th IEEE Internatio on  
 Volume 3, 2-5 Sept. 2001 Page(s):1273 - 1276 vol.3  
 Digital Object Identifier 10.1109/ICECS.2001.957447  
[Abstract](#) | [Full Text: PDF\(328 KB\)](#) IEEE CNF  
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- ☐ 4. **Low-power multiplierless FIR filter synthesizer based on CSD code**  
 Maw-Ching Liu; Chien-Lung Chen; Ding-Yu Shin; Chin-Hung Lin; Shyh-Jye Jor  
Circuits and Systems, 2001. ISCAS 2001. The 2001 IEEE International Sympo  
 Volume 4, 6-9 May 2001 Page(s):666 - 669 vol. 4  
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IEE JNL IEE Journal or Magazine

IEEE CNF IEEE Conference Proceeding

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- ☐ 1. **Fourth-order structures for multiplierless realizations of bandpass and b: filters transformed from all-pole lowpass filters**  
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- ☐ 4. **Allpass structures for multiplierless realization of recursive digital filters**  
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Circuits and Systems, 2003. ISCAS '03. Proceedings of the 2003 International  
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 Digital Object Identifier 10.1109/ISCAS.2003.1205817  
[AbstractPlus](#) | Full Text: [PDF\(405 KB\)](#) IEEE CNF  
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- ☐ 5. **Some observations on multiplierless implementation of linear phase FIR**  
 Bhattacharya, M.; Saramaki, T.;

Circuits and Systems, 2003. ISCAS '03. Proceedings of the 2003 International Volume 4, 25-28 May 2003 Page(s):IV-193 - IV-196 vol.4  
Digital Object Identifier 10.1109/ISCAS.2003.1205806  
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- ☐ **6. Some observations leading to multiplierless implementation of linear phase filters**  
Bhattacharya, M.; Saramaki, T.;  
Acoustics, Speech, and Signal Processing, 2003. Proceedings. (ICASSP '03). International Conference on  
Volume 2, 6-10 April 2003 Page(s):II - 517-20 vol.2  
Digital Object Identifier 10.1109/ICASSP.2003.1202417  
[AbstractPlus](#) | Full Text: [PDF\(324 KB\)](#) IEEE CNF  
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- ☐ **7. Multiplierless realization of recursive digital filters using allpass structures**  
Saramaki, T.; Bhattacharya, M.;  
Acoustics, Speech, and Signal Processing, 2003. Proceedings. (ICASSP '03). International Conference on  
Volume 2, 6-10 April 2003 Page(s):II - 505-8 vol.2  
Digital Object Identifier 10.1109/ICASSP.2003.1202414  
[AbstractPlus](#) | Full Text: [PDF\(313 KB\)](#) IEEE CNF  
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- ☐ **8. Multiplierless realization of all pole digital filters**  
Saramaki, T.; Bhattacharya, M.;  
Signal Processing, 2002 6th International Conference on  
Volume 1, 26-30 Aug. 2002 Page(s):1 - 4 vol.1  
Digital Object Identifier 10.1109/ICOSP.2002.1180968  
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- ☐ **9. Multiplierless implementation of all-pole digital filters**  
Bhattacharya, M.; Saramaki, T.;  
Circuits and Systems, 2002. ISCAS 2002. IEEE International Symposium on  
Volume 2, 26-29 May 2002 Page(s):II-696 - II-699 vol.2  
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- ☐ **10. Multiplierless implementation of bandpass and bandstop recursive digital filters**  
Bhattacharya, M.; Saramaki, T.;  
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Volume 2, 26-29 May 2002 Page(s):II-692 - II-695 vol.2  
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- ☐ **11. Multiplierless implementation of bandpass and bandstop IIR digital filters**  
Bhattacharya, M.; Saramaki, T.;  
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Volume 3, 13-17 May 2002 Page(s):III-3184 - III-3187 vol.3  
Digital Object Identifier 10.1109/ICASSP.2002.1005364  
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- ☐ **12. Multiplierless implementation of recursive digital filters using a class of IIR structures**

Bhattacharya, M.; Astola, J.; Saramaki, T.;  
Signal Processing and its Applications, Sixth International Symposium on, 2001  
Volume 2, 13-16 Aug. 2001 Page(s):611 - 614 vol.2  
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**13. Multiplierless implementation of recursive digital filters based on coefficient methods in low sensitivity structures**

Bhattacharya, M.; Astola, J.;  
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Volume 2, 6-9 May 2001 Page(s):697 - 700 vol. 2  
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[Circuits and Systems I: Regular Papers, IEEE Transactions on](#)  
 Volume 49, Issue 6, June 2002 Page(s):878 - 882  
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- ☐ 1. **Cascaded multiplierless realizations of low sensitivities allpass based fra filters**  
 Ivanova, K.S.; Anzova, V.I.; Stoyanov, G.K.;  
[Telecommunications in Modern Satellite, Cable and Broadcasting Services, 20 International Conference on](#)  
 Volume 1, 28-30 Sept. 2005 Page(s):111 - 114 vol. 1  
 Digital Object Identifier 10.1109/TELSKS.2005.1572074  
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- ☐ 2. **A systematic algorithm for designing multiplierless computationally effic decimators and interpolators**  
 Yli-Kaakinen, J.; Saramaki, T.;  
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 Yin, S.S.; Chan, S.C.;  
[Circuits and Systems, 2005. ISCAS 2005. IEEE International Symposium on](#)  
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- ☐ 5. **Multiplierless realization of bandpass and bandstop digital filters transfor pole lowpass filters**

Bhattacharya, M.; Saramaki, T.;  
Acoustics, Speech, and Signal Processing, 2005. Proceedings. (ICASSP '05).  
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Volume 5, 18-23 March 2005 Page(s):v/113 - v/116 Vol. 5  
Digital Object Identifier 10.1109/ICASSP.2005.1416253  
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6. **Design of multiplierless elliptic narrowband IIR digital filter based on sen**  
Trirat, A.; Chivapreecha, S.; Khunaworawet, T.; Ruangrangsarn, T.; Dejhan, K.;  
Communications and Information Technology, 2004. ISCIT 2004. IEEE Interna  
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Volume 1, 26-29 Oct. 2004 Page(s):171 - 177 vol.1  
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7. **Multiplierless implementation of bandpass and bandstop recursive digita  
allpass structures**  
Bhattacharya, M.; Saramaki, T.;  
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8. **Multiplierless realization of recursive digital filters using allpass structur**  
Saramaki, T.; Bhattacharya, M.;  
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9. **Allpass structures for multiplierless realization of recursive digital filters**  
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10. **Multiplierless predictor for DPCM of images**  
Thamvichai, R.; Bose, T.; Radenkovic, M.;  
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11. **Design of 2-D multiplierless IIR filters using the genetic algorithm**  
Thamvichai, R.; Bose, T.; Haupt, R.L.;  
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- ☒ **12. Design of high-speed multiplierless filters using a nonrecursive signed c subexpression algorithm**  
 Martinez-Peiro, M.; Boemo, E.I.; Wanhammar, L.;  
[Circuits and Systems II: Analog and Digital Signal Processing, IEEE Transactions on](#)  
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- ☐ **14. Multiplierless implementation of bandpass and bandstop IIR digital filters**  
 Bhattacharya, M.; Saramaki, T.;  
[Acoustics, Speech, and Signal Processing, 2002. Proceedings. \(ICASSP '02\). International Conference on](#)  
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 Digital Object Identifier 10.1109/ICASSP.2002.1005364  
[AbstractPlus](#) | Full Text: [PDF\(416 KB\)](#) IEEE CNF  
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- ☐ **15. Using 2<sup>nd</sup>-order information to reduce average coefficient length in**  
 DeBrunner, V.; DeBrunner, L.S.; Mohan, A.;  
[Circuits and Systems, 2002. ISCAS 2002. IEEE International Symposium on](#)  
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- ☐ **16. Multiplierless implementation of recursive digital filters using a class of I structures**  
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[Signal Processing and its Applications, Sixth International Symposium on](#)  
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- ☐ **17. Design and multiplierless implementation of two-channel biorthogonal III with low system delay**  
 Mao, J.S.; Lu, W.-S.; Chan, S.C.; Antoniou, A.;  
[Circuits and Systems, 2001. ISCAS 2001. The 2001 IEEE International Symposium on](#)  
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- ☐ **18. Multiplierless implementation of recursive digital filters based on coefficient methods in low sensitivity structures**  
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[Circuits and Systems, 2001. ISCAS 2001. The 2001 IEEE International Symposium on](#)  
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- ☐ **19. Multiplierless realization of recursive digital filters**  
Bhattacharaya, M.; Saramaki, T.; Astola, J.;  
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- ☐ **20. Novel recursive-DCT implementations: a comparative study**  
Demirsoy, S.S.; Beck, R.; Kale, I.; Dempster, A.G.;  
[Intelligent Data Acquisition and Advanced Computing Systems: Technology at International Workshop on, 2001.](#)  
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Digital Object Identifier 10.1109/IDAACS.2001.941994  
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